



April 6, 2021

Office of Engineering and Technology
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: Request for Experimental License for Retransmission of GPS L1 signal – Washington Union Station

Commissioners:

The National Railroad Passenger Corporation (“Amtrak”) hereby respectfully requests the application for a Part 5 Experimental License be approved for retransmitting Global Positioning System (“GPS”) L1 signals for the purpose of operating its Positive Train Control (“PTC”) system in the track and platform area in Washington Union Station.

As the Commission is aware, Amtrak, along with other railroads, are subject to a Congressional mandate, The Rail Safety Improvement Act of 2008 (Public Law 110–432), to implement a PTC system capable of controlling movement of trains on its owned and operated rail lines. The purpose of this mandate is to prevent: train-to-train collisions; derailments caused by excessive speed; unauthorized incursions by trains into sections of track where maintenance activities are taking place; and the movement of trains through track switches left in the wrong position. Critical components in this system is knowing the location of each train and having each train know the correct time-of-day, which is obtained via a GPS receiver located on each train.

A select number of train tracks and platforms associated with Washington Union Station are covered by structures, such as a parking garage and roadway bridge. The GPS L1 signal is severely degraded in this area and unusable for the purposes of operating a PTC system. This poses a hindrance to properly operate a PTC system for trains operated by Amtrak and local commuter railroads (i.e. MARC and VRE).

By approving the request for a Part 5 Experimental License, Amtrak will install equipment to relay the GPS L1 signal to a select track area associated with Washington Union Station. In doing so, Amtrak will take care to only transmit the GPS L1 signal to the areas need for operating its PTC system.

Respectfully,

A handwritten signature in black ink that reads "Eric Rivas". The signature is written in a cursive, flowing style.

Eric Rivas
Amtrak
Senior Electrical Engineer - Radio